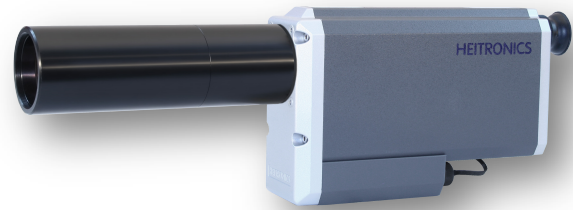


Technical Data Sheet

TRT IV.82

Transfer Radiation Thermometer

- Highest accuracy and long-term stability
- Wide temperature range -50 ... 1000 °C
- View finder and focus laser
- Improved infrared optic for a precise FOV
- High temperature resolution 0.02 °C



Measurement specifications

Temperature range:	-50 ... 1000°C
Permissible ambient temperature:	23 °C ± 3 °C
Spectral response:	8 ... 14 µm
Uncertainty:	Depending on the calibration laboratory (see next page)
Temperature resolution (NETD):	Depending on the measured temperature and the response time Typical value is 0.02 ... 0.06 K (2 Sigma, by 3 s, ε = 1)
Long-term stability:	Better than 0.01 % of the absolute measured temperature per month
Field of view (appr.):	6.8 mm @ 380 mm
Response time:	Adjustable from 30 ms to 60 s, recommended: 3 s
Temperature unit:	°C, K or °F
Emissivity:	Set to 1

Electrical specifications / Functions

Analog output:	Scalable temperature span: Selectable 0 ... 1 V; 0 ... 10 V; 0 ... 20 mA; 4 ... 20 mA; resolution : 12 bit
Function:	maximum or minimum value output signal linearly to temperature or radiation
Serial interface:	RS232 interface, bidirectional, for programming and data transfer
Programmable via serial interface:	Emissivity, analog output, analog output function, response time, temperature unit, Min and Max value memory with decay rate and alarm output
Operating voltage:	DC: 20 ... 30 V AC: 24 V ± 10 %
Power consumption:	VAC ≤ 4 W

Technical Data Sheet

General specifications

Storage temperature: -20 ... 70 °C

Protection class: IP65 (IEC), (NEMA 4)

Housing: Coated aluminum

Weight: Appr. 2.5 kg

Scope of supply and Options¹

■ Standardfunktion; □ Option

Case: ■² Protecting carrying case

TRT Lens: ■ Type S977 AR (high quality ZnSe lens)
■ Size of source effect (SSE) diagram

Laser aiming options: ■ View finder and focus laser

Software: ■ EasyTRT: software for data evaluation, graphic display and export of the measured values

Interface connection: ■ RS232 PVC cable, 2 m long

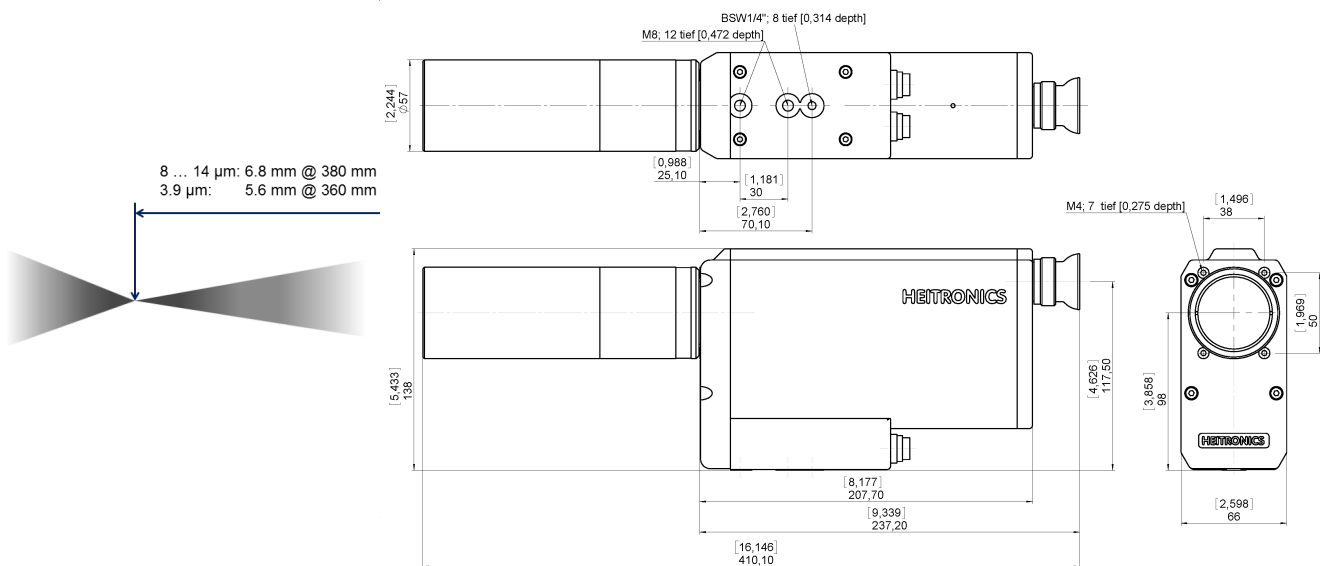
Power adapter ■ Plug-in power supply T21; 80 ... 240 VAC, 50 ... 60 Hz, 620 mA

Certificates of calibration:

HEITRONICS certificate for: ■ 10 temperature steps -20; 1; 32; 50; 100; 200; 350; 500; 800; 1000 °C
Uncertainty (k=2) for -21 ... 32 °C ≤ 0.28 °C; 100 ... 600 °C ≤ 0.5 °C;
660 ... 1000 °C = 0.6 °C
(typical values based on HEITRONICS calibration report before August 1, 2018)

PTB certificate for: □ 10 temperature steps -39; 0; 30; 100; 200; 300; 420; 660; 810; 960 °C
Uncertainty (k=2) for -40 ... 32 °C = 0.07 °C; 100 ... 600 °C ≤ 0.14 °C;
600 ... 1000 °C = 0.21 °C
(typical values based on PTB calibration report before August 1, 2018)

Dimensions



¹ Special model specification on request.

² ■ Standard function
□ Option